

JON M. HUNTSMAN, JR.

Governor

GARY HERBERT Lieutenant Governor

Department of Environmental Quality

Richard W. Sprott Executive Director

DIVISION OF AIR QUALITY Cheryl Heying Director

DAQE-IN0105650014-08

March 21, 2008

Brian Harris Geneva Rock Products 1565 West 400 North Orem, Utah 84057

Dear Mr. Harris:

Re:

Intent to Approve: Modification of Approval Order DAQE-AN0565012-03 for an Aggregate, Asphalt, & Concrete Productions Increase, Equipment Additions and Operation Clarifications, Salt Lake County, CDS SM; NA; MAINT; HAPs, TITLE V MINOR Project Code: N010565-0014

The attached document is the Intent to Approve (ITA) for the above-referenced project. The Intent to Approve is subject to public review. Any comments received shall be considered before an Approval Order is issued.

Future correspondence on this Intent to Approve should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any questions you may have on this project to Mr. Jon Black. He may be reached at (801) 536-4047.

Sincerely,

Ty Howard, Manager New Source Review Section

TH:JB:kw

cc:

Salt Lake Valley Health Department

Mike Owens, EPA Region VIII

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

INTENT TO APPROVE: Modification of Approval Order DAQE-AN0565012-03 for an Aggregate, Asphalt, & Concrete Production Increase, Equipment Additions and Operation Clarifications

Prepared By: Jon Black, Engineer (801) 536-4047 Email: jlblack@utah.gov

INTENT TO APPROVE NUMBER

DAQE-IN0105650014-08

Date: March 21, 2008

Geneva Rock Products

Source Contact Brian Harris (801) 802-6954

M. Cheryl Heying Executive Secretary Utah Air Quality Board

Abstract

Geneva Rock Products has submitted two Notice of Intents requesting a modification to their current Approval Order DAQE-AN0565012-03. The modification shall consist of a proposed increase of aggregate, asphalt, & concrete production, miscellaneous equipment changes, and operating clarifications. The Utah Division of Air Quality (DAQ) combined the two NOI's, based on a 'common sense notion of a plant', and has concluded that all operations and activities at this location constitute one source. The Hansen-Lehi plant is located at 15547 South Minuteman Drive, Draper, Utah. This plant is located in Salt Lake County, which is a Non-attainment area of the National Ambient Air Quality Standards (NAAQS) for PM₁₀, and is a Maintenance area for O₃. New Source Performance Standards (NSPS) Subpart A, I, & OOO regulations apply to this source. National Emission Standards for Hazardous Air Pollutants (NESHAP) and Maximum Achievable Control Technology (MACT) regulations do not apply to this source. Title V of the 1990 Clean Air Act applies to this source.

Best Available Control Technology will be required for this source. Fugitive dust shall be controlled by wet suppression methods consisting of water sprays, water trucks, washing and sweeping of the haul road surfaces, and material moisture content requirements. BACT will also require the use of baghouses and bin-vent control devices for the asphalt and concrete plant exhaust points and cement, lime and flyash storage silos associated with these plants. An approved fugitive dust control plan will also be required for this site location.

The emissions, in tons per year, will change as follows: PM_{10} (+) 72.03, NO_x (+) 47.39, SO_2 (+) 11.42, CO (+) 71.12, VOC (+) 7.16, HAPs (+) 1.53. The changes in emissions will result in the following, in tons per year, potential to emit totals: $PM_{10} = 128.86$ (125.58 fugitive, 3.28 point source), $NO_x = 65.58$ (13.07 from fugitive blasting), $SO_2 = 25.93$, CO = 111.98 (51.52 from fugitive blasting), VOC = 20.94, HAPs = 4.42.

Under Utah Air Quality Rule R307-403-5: Offsets: PM_{10} Nonattainment Areas, any increase in combined PM_{10} , SO_2 , and NO_x emissions, which exceed 50 tons/year shall obtain offsets at the ratio of 1.2:1 for the emission increase. The potential increase in emission of combined PM_{10} , SO_2 , and NO_x emissions for Geneva Rock Products' proposal is 130.84 tons which requires a total of 157.01 emission offset credits with the 1.2:1 offset ratio applied. Also, potential emission rates of PM_{10} and CO do exceed the Major Source threshold of 100 tons/year. Because a large portion of this site consists of fugitive emission sources, the non-fugitive emission sources of this facility do not exceed 100 tons/year, and this site is designated as an aggregate plant, Geneva Rock products' Hansen-Lehi pit shall be considered a Title V Minor source (See UAC R307-101-2 Definition of Major Source).

The Notice of Intent (NOI) for the above-referenced project has been evaluated and has been found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307). Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an Approval Order (AO) by the Executive Secretary of the Utah Air Quality Board.

A 30-day public comment period will be held in accordance with UAC R307-401-4. A notice of intent to approve will be published in the Salt Lake Tribune and Deseret News on March 25, 2008. During the public comment period the proposal and the evaluation of its impact on air quality will be available for both you and the public to review and comment. If anyone so requests a public hearing it will be held in accordance with UAC R307-401-4. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated.

Please review the proposed AO conditions during this period and make any comments you may have. The proposed conditions of the AO may be changed as a result of the comments received. Unless changed, the AO will be based upon the following conditions:

General Conditions:

1. This AO applies to the following company:

Site Office	Corporate Office Location
Geneva Rock Products 15547 South Minuteman Drive Draper, Utah 84020	Geneva Rock Products 1565 West 400 North Orem, Utah 84057
Phone Number (801) 281-7950	(801) 802-6954
Fax Number (801) 281-7970	(801) 225-7830

The equipment listed in this AO shall be operated at the following location:

15547 South Minuteman Drive, Draper. Located on the east side of Interstate 15 (I-15) near the I-15 Exit 291, Salt Lake County

Universal Transverse Mercator (UTM) Coordinate System: UTM Datum NAD27 4,480.19 kilometers Northing, 423.09 kilometers Easting, Zone 12

- 2. All definitions, terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code (UAC) Rule 307 (R307) and Title 40 of the Code of Federal Regulations (40 CFR). Unless noted otherwise, references cited in these AO conditions refer to those rules.
- 3. The limits set forth in this AO shall not be exceeded without prior approval in accordance with R307-401.
- 4. Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved in accordance with R307-401.
- 5. All records referenced in this AO or in applicable NSPS standards, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request. Records shall be kept for the following minimum periods:

A.	Used oil consumption	Three years
B.	Emission inventories	Five years from the due date of each emission statement or until the next inventory is due, whichever is longer.
C.	NSPS records	All NSPS records for the on-site processing equipment listed in Condition # 9 shall be maintained on-site for a

minimum of two years and shall be made available to the Executive Secretary or the Executive Secretary's representative upon request.

D. All other records Two years

- 6. Geneva Rock Products (GRP) shall install and operate the aggregate, asphalt & concrete batch plants and associated equipment and shall conduct its operations at the Hansen-Lehi plant in accordance with the terms and conditions of this AO, which was written pursuant to Geneva Rock Product's Notice of Intent submitted to the Division of Air Quality (DAQ) on August 31, 2007 and additional information submitted to the DAQ on September 19, 2007, September 25, 2007, November 27, 2007, January 2, 2008, January 7, 2008, January 8, 2008, January 21, 2008, January 22, 2008, February 15, 2008, February 28, 2008, March 3, 2008, March 4, 2008, March 12, 2008, and March 18, 2008.
- 7. The GRP Point of the Mountain location is a State Implementation Plan (SIP) source consisting of the Hansen-Lehi and Mount Jordan pits and is listed in Section IX, Part H, Page 12 of the Salt Lake County SIP.
- 8. This AO shall replace the AO (DAQE-AN0565012-03) dated December 29, 2003.
- 9. The approved installations shall consist of the following equipment or equivalent*:

Aggregate Plants¹

A.	Crushing Equipment	Manufacturer Rating
	 Crusher 1 Crusher 2 Crusher 3 Crusher 4 Crusher 5 Crusher 6 Crusher 7 Portable Oversized Crusher 	Capacity: 385 tons per hour (tph) Capacity: 335 tph Capacity: 400 tph Capacity: 380 tph Capacity: 275 tph Capacity: 620 tph Capacity: 250 tph Capacity: 400 tph
B.	Screening Equipment	Manufacturer Rating
	 Screen 1 Screen 2 Screen 3 Screen 4 Screen 5 Screen 6 Screen 7 Screen 8 Screen 9 	Capacity: 750 tph Capacity: 750 tph Capacity: 750 tph Capacity: 660 tph Capacity: 275 tph Capacity: 920 tph Capacity: 920 tph Capacity: 920 tph Capacity: 920 tph Capacity: 550 tph

^{1 -} The equipment listed in Condition 9.A.1-8 and 9.B.1-13 is Subject to NSPS 40 CFR 60 Subpart OOO.

 10) Screen 10
 Capacity: 550 tph

 11) Screen 11
 Capacity: 400 tph

 12) Screen 12
 Capacity: 400 tph

 13) Screen 13
 Capacity: 400 tph

Asphalt Plant²

C. One (1) hot mix asphalt plant

Rated Capacity: 500 tph

1) One (1) drum mixer

Fuel type: natural gas, liquid propane, #2 thru #6 fuel oil, & used oil

2) One (1) baghouse control device

3) Two (2) scalping screens Manufacturer Capacity: 550 tph each

4) Two (2) hot oil heaters Rating: 2.8 MMBTU/hr each

Concrete Plant

D. One (1) central mix concrete batch plant (Unit Id- CCBP)

Rated Capacity: 280 cubic yard/hr

Control Device: baghouse

E. One (1) portable truck mix concrete batch plant (Unit Id- PCBP)

Rated Capacity: 220 cubic yard/hr

Control Device: bin-vent

F. One (1) hot water heater/boiler (Unit Id- WHB-CCBP) Rating: 9.9 MMBTU/hr

Fuel type: natural gas/propane

G. One (1) hot water heater/boiler (Unit Id- WHB-PCBP), Rating: 2.9 MMBTU/hr

Fuel type: diesel

Miscellaneous Equipment

- H. Miscellaneous processing equipment associated with all three plants**:
 - 1) Grizzlies, feeders, splitters, traps, load bins, cold feed bins, conveyors, wet screens, fine material washers, coarse material washers, screws, cyclones,

^{2 -} The equipment listed in Condition 9.C and 9.C.1-2 is Subject to NSPS 40 CFR 60 Subpart I.

clarifiers, stackers, drilling/blasting equipment, material storage silos, volatile organic liquid storage tanks, etc.

- I. Miscellaneous off highway vehicles associated with all plants**:
 - 1) Front-end loaders, bulldozers, scrapers, drag-lines, track-hoes, haul trucks, water trucks, sweeper truck, fork-lifts, boom trucks, etc.
- J. Diesel Generators

1)	Portable Generator #1	Fuel Type: Rating:	Diesel 817 hp
2)	Portable Generator #2	Fuel Type: Rating:	Diesel 665 hp
3)	Portable Generator #3	Fuel Type: Rating:	Diesel 120 hp
4)	Portable Generator #4	Fuel Type: Rating:	Diesel 65 hp
5)	Portable Generator #5	Fuel Type: Rating:	Diesel 65 hp
6)	Portable Generator #6	Fuel Type: Rating:	Diesel 400 hp

^{*} Equivalency shall be determined by the Executive Secretary.

10. GRP shall notify the Executive Secretary in writing when the installation of the equipment listed in Condition #9 has been completed and is operational, as an initial compliance inspection is required. To insure proper credit when notifying the Executive Secretary, send correspondence to the Executive Secretary, attn: Compliance Section.

If the construction and/or installation has not been completed within eighteen months from the date of this AO, the Executive Secretary shall be notified in writing on the status of the construction and/or installation. At that time, the Executive Secretary shall require documentation of the continuous construction and/or installation of the operation and may revoke the AO in accordance with R307-401-18.

^{**} This equipment is listed for informational purposes only but operation of this equipment shall meet the required opacity limitations of this AO.

Limitations and Test Procedures

11. Emissions to the atmosphere at all times from the indicated emission point shall not exceed the following rates and concentrations:

Source: Asphalt Plant Baghouse

<u>Pollutant</u>	<u>lb/hr</u>	grains/dscf
		(68EF, 29.92 in Hg)
PM ₁₀ ³	10.6	0.024

12. Stack testing to show compliance with the emission limitations stated in the above condition shall be performed as specified below:

A.			Testing	Test
	Emissions Point	<u>Pollutant</u>	<u>Status</u>	<u>Frequency</u>
	Asphalt Plant	PM ₁₀	*	#
	Baghouse			

- B. <u>Testing Status</u>
 - * The last compliance test was performed on July 8, 2004.
 - # Test every 5 years. The Executive Secretary may require testing at any time.

C. Notification

The Executive Secretary shall be notified at least 30 days prior to conducting any required emission testing. A source test protocol shall be submitted to DAQ when the testing notification is submitted to the Executive Secretary.

The source test protocol shall be approved by the Executive Secretary prior to performing the test. The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. A pretest conference shall be held, if directed by the Executive Secretary.

D. <u>Sample Location</u>

The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other methods as approved by the Executive Secretary. An Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

^{3 -} This limitation is for processing both recycle (RAP) and virgin materials.

E. Volumetric Flow Rate

40 CFR 60, Appendix A, Method 2 or other testing methods approved by the Executive Secretary.

F. <u>PM</u>₁₀

For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201, 201a, or other testing methods approved by the Executive Secretary. The back half condensibles shall also be tested using the method specified by the Executive Secretary.

For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate.

The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.

G. Calculations

To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary, to give the results in the specified units of the emission limitation.

H. New Source Operation

For a new source/emission point, the production rate during all compliance testing shall be no less than 90 percent of the production rate listed in this AO. If the maximum AO allowable production rate has not been achieved at the time of the test, the following procedure shall be followed:

- 1) Testing shall be at no less than 90 percent of the production rate achieved to date.
- 2) If the test is passed, the new maximum allowable production rate shall be 110 percent of the tested achieved rate, but not more than the maximum allowable production rate. This new allowable maximum production rate shall remain in effect until successfully tested at a higher rate.
- The owner/operator shall request a higher production rate when necessary. Testing at no less than 90 percent of the higher rate shall be conducted. A new maximum production rate (110 percent of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum AO production rate is achieved.

I. Existing Source Operation

For an existing source/emission point, the production rate during all compliance testing shall be no less than 90 percent of the maximum production achieved in the previous three (3) years.

In all cases, when testing for PM_{10} emissions during manufacture of recycle asphalt, recycle asphalt shall be introduced into the plant at a rate no less than 15 percent of the plant production (i.e. if the plant is producing 400 tons per hour of finished product, then asphalt to be recycled shall be introduced into the plant at a rate no less than 60 tons per hour).

- 13. Visible emissions from the following emission points shall not exceed the following values:
 - A. All crushers 10 percent opacity
 - B. All screens 10 percent opacity
 - C. All conveyor transfer points -10 percent opacity
 - D. All baghouses exhaust points (including asphalt plant) 10 percent opacity
 - E. All bin-vent exhaust points 10 percent opacity
 - F. All diesel engines 20 percent opacity
 - G. All conveyor drop points 20 percent opacity
 - H. All other points -20 percent opacity

Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.

For new sources that are subject to NSPS, initial opacity shall be determined by conducting observations in accordance with 40 CFR 60.11(b).

14. Visible fugitive dust emissions from haul-road traffic and mobile equipment in operational areas shall not exceed 20 percent opacity. Visible emission determinations for traffic sources shall use procedures similar to Method 9, as described in the Fugitive Dust Control Plant (FDCP) for the site. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply.

When the Executive Secretary or Executive Secretary's representative is on site to observe opacity, six points, distributed along the length of the haul road or in the operational area, shall be chosen by the Executive Secretary or the Executive Secretary's representative. An opacity reading shall be made at each point when a vehicle passes the selected points. Opacity readings shall be made ½ vehicle length or greater behind the vehicle and at approximately ½ the height of the vehicle or greater. The accumulated six readings shall be averaged for the compliance value.

15. The following production and/or consumption limits shall not be exceeded:

Asphalt Production

- A. 500 tons of asphalt produced per hour (virgin and recycle asphalt pavement (RAP) averaged over each operating day).
- B. 800,000 tons of asphalt production (virgin and RAP combined) per rolling 12-month period.

Concrete Production

C. 400,000 cubic yards of concrete produced per rolling 12-month period (Both CCBP and PCBP plants combined).

Aggregate Production

- D. 14,000,000 tons of aggregate production (including bank run material) per rolling 12-month period, where no more than 10,275,000 tons of aggregate is processed per rolling 12-month period.
- E. Bulldozing hours of operation
 - 1) 24,000 hours of operation per rolling 12-month period for all bulldozers.
- F. Diesel generators Horsepower-Hours (hp-hrs) operation
 - 1) 1,926,600 total hp-hrs of operation per rolling 12-month period for the diesel generators with a power rating greater than 600 hp.
 - 2) 423,000 total hp-hrs of operation per rolling 12-month period for the diesel generators with a power rating less than 600 hp.
- G. 8,000 combined hours of operation for both 2.8 MMBTU/hr natural gas (or liquid propane) fired hot oil heaters per rolling 12-month period.
- H. 1,500 hours of operation for the 9.9 MMBTU/hr natural gas (or liquid propane) fired hot water heater per rolling 12-month period.
- I. 500 hours of operation for the 2.9 MMBTU/hr diesel fired hot water heater per rolling 12-month period.
- J. 44,000 tons of asphalt cement consumed per rolling 12-month period.
- K. 90,500 gallons of gasoline throughput for the gasoline fuel storage tanks per rolling 12-month period.

^{4 -} Processed is defined as passing through a crushing or screening unit prior to product usage or delivery.

- L. 1,744,000 gallons of diesel fuel throughput for the diesel fuel storage tanks per rolling 12-month period.
- M. 1,600,000 gallons of waste or burner fuel oil throughput for the storage tanks per rolling 12-month period.

Compliance with the hourly limitations shall be determined on a daily average (12 a.m. to 12 a.m.). Each day the owner/operator shall calculate a new hourly average based on the previous days production. Hours of operation shall be determined by supervisor monitoring and maintaining of an operations log.

Generator and bulldozer hours of operation shall be determined by hour meters installed on the equipment or other appropriate method as established by GRP.

Records of consumption/production shall be kept for all periods when the plant is in operation. Production/Consumption shall be determined by production scales, scale house records, vendor receipts, fuel delivery/usage records and/or any other appropriate mechanism. The records of consumption/production shall be kept on a daily basis. To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months.

Roads and Fugitive Dust

- 16. GRP shall abide by a Fugitive Dust Control Plan (FDCP) acceptable to the Executive Secretary for control of all fugitive dust sources associated with the Hansen-Lehi plant. GRP shall submit two copies of the FDCP to the Executive Secretary, attention: New Source Review Section and Compliance Section, for approval prior to the issuance of the AO. Subsequent updates to the FDCP shall be submitted and approved in accordance with the above stated requirements. GRP shall abide by the most current FDCP approved by the Executive Secretary. The haul road speed shall be posted.
- 17. Control of surfaces subject to wind erosion shall be required and addressed within the FDCP.
- 18. A shroud shall be used to control fugitive emission associated with all air compression drilling operations.
- 19. All paved and unpaved roads and other unpaved operational areas that are used by mobile equipment shall be maintained to control fugitive dust in accordance with the FDCP. The opacity of any haul road, paved or unpaved, shall not exceed 20 percent during all times the areas are in use. Records, as required by the FDCP, of control treatments shall be kept for all periods when the plant is in operation.
- 20. Water sprays or chemical dust suppression sprays shall be installed at the following points to control fugitive emissions:
 - A. All crusher inlet and outlet points
 - B. All dry screens

C. All conveyor transfer and stacker drop points

The sprays shall operate whenever conditions warrant, as outlined in the FDCP, to meet the opacity requirements of this AO.

- 21. The storage piles shall be watered to minimize generation of fugitive dust as conditions warrant, as outlined in the FDCP.
- 22. All displaced air from the asphalt and concrete plants lime, cement, & flyash silos shall pass through a fabric filter device before being vented to the atmosphere.
- 23. The truck mix batch plant shall use a hood covering the truck inlet when loading the concrete trucks. The hood exhaust shall pass through a bin-vent prior to being vented to the atmosphere.
- 24. GRP shall abide by all applicable requirements of R307-309 for PM₁₀ non-attainment areas. The full text of R307-309, Nonattainment and Maintenance Areas for PM₁₀: Fugitive Emissions and Fugitive Dust is included as Appendix A. However, to be in compliance, this source must operate in accordance with the most current version of R307-309.

Fuels

- 25. The owner/operator shall use natural gas, liquid propane, fuel oil, #2 diesel or used oil as fuel in the asphalt plant. Used oil shall comply with the conditions listed in Condition #28 below for energy recovery.
- 26. The owner/operator shall use natural gas, liquid propane, #1, #2, a combination of #1 and #2 diesel fuel, or gasoline in all other on-site equipment.
- 27. The sulfur content of any fuel oil or diesel burned shall not exceed:
 - A. 0.50 percent by weight for fuels used in the asphalt plant.
 - B. 0.05 percent by weight for diesel fuels consumed in all other on-site equipment.

The sulfur content shall be determined by ASTM Method D-4294-89 or approved equivalent. Certification of fuel oil shall be either by GRP's own testing or test reports from the fuel oil marketer. Certification of other fuels shall be either by GRP's own testing or test reports from the fuel marketer.

- 28. Equipment burning used oil for energy recovery shall comply with the following:
 - A. The concentration/parameters of contaminants in any used oil fuel shall not exceed the following levels:

1)	Arsenic5	ppm by weight
2)	Cadmium2	ppm by weight
3)	Chromium10	ppm by weight

4)	Lead100	ppm by weight
5)	Total halogens1,000	ppm by weight
6)	Sulfur0.5	percent by weight

- B. The flash point of all used oil to be burned shall not be less than 100 °F.
- C. The owner/operator shall provide test certification for each shipment of used oil fuel received or generated on site. Certification shall be either by their own testing or test reports from the used oil fuel marketer. Records of used oil fuel consumption and the test reports shall be kept for all periods when the plant is in operation.
- D. Used oil that does not exceed any of the listed contaminants listed in Condition 28.A above may be burned. The owner/operator shall record the quantities of used oil burned on a daily basis.
- E. Any used oil fuel that contains more than 1000 ppm by weight of total halogens shall be considered a hazardous waste and shall not be burned in the asphalt burner or boiler. The oil shall be tested for halogen content by ASTM Method D-808-81, EPA Method 8240 or Method 8260 before used oil fuel is transferred to the asphalt plant fuel tank or boiler tank and burned.
- F. Sources utilizing used oil as a fuel shall comply with the State Division of Solid and Hazardous Waste in accordance with R315-15, UAC.

Federal Limitations and Requirements

29. In addition to the requirements of this AO, all applicable provisions of 40 CFR 60, New Source Performance Standards (NSPS) Subpart A, 40 CFR 60.1 to 60.18 (General Provisions), Subpart I, 40 CFR 60.90 to 60.93 (Standards of Performance for Hot Mix Asphalt Facilities) and Subpart OOO, 40 CFR 60.670 to 60.676 (Standards of Performance for Nonmetallic Mineral Processing Plants) apply to the affected equipment located at the Geneva Rock Products Hansen-Lehi pit operation.

To be in compliance, this source must operate in accordance with the most current version of 40 CFR 60 applicable to this source.

Monitoring - General Process

- 30. The asphalt plant baghouse shall control process exhaust from the asphalt drum mixer. This baghouse shall be sized to <u>design parameters of at least 90,000 ACFM for the existing conditions</u>. All exhaust air from the drum mixer shall be routed through the baghouse before being vented to the atmosphere.
- 31. The asphalt plant baghouse stack height shall be a minimum of 65 feet, as measured from the ground level.
- 32. The following operating parameters shall be maintained within the indicated ranges:

A. Asphalt plant baghouse

1) The pressure drop shall not be less than 2.0 inches of water column or more than 6.0 inches of water column.

The pressure drop shall be monitored with equipment located such that an inspector/operator can safely read the output any time. The readings shall be accurate to within the following ranges:

B. Pressure drop - Plus or minus 0.5 inches of water column

All instruments shall be calibrated according to the manufactures instructions at least once every 12 months. Continuous recording of the measurements of the monitoring device is not required. However, records of one reading per operational day, shall be maintained.

Records & Miscellaneous

- 33. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on the information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- 34. All maintenance performed on equipment authorized by this AO, that has the potential to affect air emissions control, shall be recorded by Geneva Rock Products.
- 35. The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring.
- 36. The owner/operator shall comply with R307-107. General Requirements: Unavoidable Breakdowns.

The Executive Secretary shall be notified in writing if the company is sold or changes its name.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including R307.

A copy of the rules, regulations and/or attachments addressed in this AO may be obtained by contacting the Division of Air Quality. The Utah Administrative Code R307 rules used by DAQ, the Notice of Intent (NOI) guide, and other air quality documents and forms may also be obtained on the Internet at the following web site:

http://www.airquality.utah.gov/

The annual emissions estimations below include point source, fugitive emissions, fugitive dust, road dust, and loader/dozer tail pipe emissions. These emissions are for the purpose of determining the applicability of Prevention of Significant Deterioration, non-attainment area, Maintenance area, and Title V source requirements of the R307. They are not to be used for determining compliance.

The Potential to Emit (PTE) emissions for Geneva Rock Products – Hansen-Lehi Pit (the entire plant) are currently calculated at the following values:

	<u>Pollutant</u>	Tons/yr
A.	PM ₁₀	128.86
B.	SO ₂	25.93
C.	NO _x	65.58
D.	CO	111.98
E.	VOC	20.94
F.	HAPs	
	Ethyl Benzene	0.10
	Formaldehyde	1.24
	Toluene	1.16
	Xylene	0.08
	Total Misc HAPs	
	Total HAPs	4.42

The DAQ is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an AO. An invoice will follow upon issuance of the final AO.

Sincerely,

Ty Howard, Manager New Source Review Section

Appendix A

R307-309. Nonattainment and Maintenance Areas for PM10: Fugitive Emissions and Fugitive Dust.

R307-309-1. Purpose.

This rule establishes minimum work practices and emission standards for sources of fugitive emissions and fugitive dust listed in Section IX, Part H of the state implementation plan or located in PM10 nonattainment and maintenance areas to meet the reasonably available control measures for PM10 required in section 189(a)(1)(C) of the Act.

R307-309-2. Definitions.

The following addition definition applies to R307-309:

"Material" means sand, gravel, soil, minerals other matter that may create fugitive dust.

R307-309-3. Applicability.

- (1) Applicability. R307-309 applies to all sources of fugitive dust and fugitive emissions listed in Section IX, Part H of the state implementation plan or located in a nonattainment or maintenance area for PM10, except as specified in (2) below.
- (2) Exemptions.
- (a) The provisions of R307-309 do not apply to agricultural or horticultural activities specified in 19-2-114 (1)-(3).
- (b) Any activity subject to R307-307 is exempt from R307-309-7.
- (3) Compliance Schedule. Any source located in a new nonattainment area for PM10 is subject to R307-309 180 days after the area is designated nonattainment by the Environmental Protection Agency. Provisions of R307-205 shall continue to apply to the owner or operator of a source during this transition period.

R307-309-4. Fugitive Emissions.

Fugitive emissions from any source shall not exceed 15% opacity. Opacity observations of emissions from stationary sources shall be conducted in accordance with EPA Method 9. For intermittent sources and mobile sources, opacity observations shall use procedures similar to Method 9, but the requirement for observations to be made at 15-second intervals over a six-minute period shall not apply.

R307-309-5. General Requirements for Fugitive Dust.

- (1) Except as provided in (2) below, opacity caused by fugitive dust shall not exceed:
- (a) 10% at the property boundary; and
- (b) 20% on site
- (2) Opacity in (1) above shall not apply when the wind speed exceeds 25 miles per hour and the owner or operator is taking appropriate actions to control fugitive dust.
- (a) If the source has a fugitive dust control plan approved by the executive secretary, control measures in the plan are considered appropriate.
- (b) Wind speed may be measured by a hand-held anemometer or equivalent device.
- (3) Opacity observations of emissions from stationary sources shall be conducted in accordance with EPA Method 9. For intermittent sources and mobile sources, opacity observations shall use procedures similar to Method 9, but the requirement for observations to be made at 15-second intervals over a six-minute period shall not apply.

R307-309-6. Fugitive Dust Control Plan.

(1) Any person owning or operating a new or existing source of fugitive dust, including storage, hauling or handling operations, or engaging in clearing or leveling of land one-quarter acre or greater in size, earthmoving, excavation, or

movement of trucks or construction equipment over cleared land one-quarter acre or greater in size or access haul roads, or engaging in demolition activities including razing homes, buildings or other structures shall submit a plan to control fugitive dust to the executive secretary no later than 30 days after the source becomes subject to R307-309. The plan shall address fugitive dust control strategies for the following operations as applicable:

- (a) Material Storage;
- (b) Material handling and transfer;
- (c) Material processing;
- (d) Road ways and yard areas;
- (e) Material loading and dumping;
- (f) Hauling of materials;
- (g) Drilling, blasting and pushing operations;
- (h) Clearing and leveling;
- (i) Earth moving and excavation;
- (j) Exposed surfaces;
- (k) Any other source of fugitive dust.
- (2) Strategies to control fugitive dust may include:
- (a) Wetting or watering;
- (b) Chemical stabilization;
- (c) Enclosing or covering operations;
- (d) Planting vegetative cover;
- (e) Providing synthetic cover;
- (f) Wind breaks;
- (g) Reducing vehicular traffic;
- (h) Reducing vehicular speed;
- (i) Cleaning haul trucks before leaving loading area;
- (j) Limiting pushing operations to wet seasons;
- (k) Paving or cleaning road ways;
- (l) Covering loads;
- (m) Conveyor systems;
- (n) Boots on drop points;
- (o) Reducing the height of drop areas;
- (p) Using dust collectors;
- (q) Reducing production;
- (r) Mulching;
- (s) Limiting the number and power of blasts;
- (t) Limiting blasts to non-windy days and wet seasons;
- (u) Hydro drilling;
- (v) Wetting materials before processing;
- (w) Using a cattle guard before entering a paved road;
- (x) Washing haul trucks before leaving the loading site;
- (y) Terracing:
- (z) Cleaning the materials that may create fugitive dust on a public or private paved road promptly; or
- (aa) Preventing, to the maximum extent possible, material from being deposited onto any paved road other than a designated deposit site.
- (3) Each source shall comply with all provisions of the fugitive dust control plan as approved by the executive secretary.

R307-309-7. Storage, Hauling and Handling of Aggregate Materials.

Any person owning, operating or maintaining a new or existing material storage, handling or hauling operation shall prevent, to the maximum extent possible, material from being deposited onto any paved road other than a designated deposit site. Any such person who deposits materials that may create fugitive dust on a public or private paved road shall clean the road promptly.

R307-309-8. Construction and Demolition Activities.

Any person engaging in clearing or leveling of land with an area of one-quarter acre or more, earthmoving, excavating, construction, demolition, or moving trucks or construction equipment over cleared land or access haul roads shall prevent, to the maximum extent possible, material from being deposited onto any paved road other than a designated deposit site. Any such person who deposits materials that may create fugitive dust on a public or private paved road shall clean the road promptly.

R307-309-9. Roads.

- (1) Any person responsible for construction or maintenance of any existing road or having right-of-way easement or possessing the right to use the same whose activities result in fugitive dust from the road shall minimize fugitive dust to the maximum extent possible. Any such person who deposits materials that may create fugitive dust on a public or private paved road shall clean the road promptly.
- (2) Unpaved Roads. Any person responsible for construction or maintenance of any new or existing unpaved road shall prevent, to the maximum extent possible, the deposit of material from the unpaved road onto any intersecting paved road during construction or maintenance. Any person who deposits materials that may create fugitive dust on a public or private paved road shall clean the road promptly.

R307-309-10. Mining Activities.

- (1) Fugitive dust, construction activities, and roadways associated with mining activities are regulated under the provisions of R307-309-10 and not by R307-309-7, 8, 9, and 11.
- (2) Any person who owns or operates a mining operation shall minimize fugitive dust as an integral part of site preparation, mining activities, and reclamation operations.
- (3) The fugitive dust control measures to be used may include:
- (a) periodic watering of unpaved roads,
- (b) chemical stabilization of unpaved roads,
- (c) paving of roads,
- (d) prompt removal of coal, rock minerals, soil, and other dust-forming debris from roads and frequent scraping and compaction of unpaved roads to stabilize the road surface,
- (e) restricting the speed of vehicles in and around the mining operation,
- (f) revegetating, mulching, or otherwise stabilizing the surface of all areas adjoining roads that are a source of fugitive dust,
- (g) restricting the travel of vehicles on other than established roads,
- (h) enclosing, covering, watering, or otherwise treating loaded haul trucks and railroad cars, to minimize loss of material to wind and spillage,
- substitution of conveyor systems for haul trucks and covering of conveyor systems when conveyed loads are subject to wind erosion,
- (j) minimizing the area of disturbed land,
- (k) prompt revegetation of regraded lands,
- (l) planting of special windbreak vegetation at critical points in the permit area,
- (m) control of dust from drilling, using water sprays, hoods, dust collectors or other controls approved by the executive secretary.
- (n) restricting the areas to be blasted at any one time,
- (o) reducing the period of time between initially disturbing the soil and revegetating or other surface stabilization,
- (p) restricting fugitive dust at spoil and coal transfer and loading points,
- (q) control of dust from storage piles through use of enclosures, covers, or stabilization and other equivalent methods or techniques as approved by the executive secretary, or
- (r) other techniques as determined necessary by the executive secretary.

R307-309-11. Tailings Piles and Ponds.

- (1) Fugitive dust, construction activities, and roadways associated with tailings piles and ponds are regulated under the provisions of R307-309-11 and not by R307-309-7, 8, 9, and 10.
- (2) Any person owning or operating an existing tailings operation where fugitive dust results from grading, excavating, depositing, or natural erosion or other causes in association with such operation shall take steps to minimize fugitive dust from such activities. Such controls may include:
- (a) watering,
- (b) chemical stabilization,
- (c) synthetic covers,
- (d) vegetative covers,
- (e) wind breaks,
- (f) minimizing the area of disturbed tailings,
- (g) restricting the speed of vehicles in and around the tailings operation, or
- (h) other equivalent methods or techniques which may be approvable by the executive secretary.